LISTING OF CLAIMS

The listing of claims provided below replaces all prior versions, and listings, of claims in the application.

5   1.   (Currently Amended) A method for <u>monitoring a data center</u> ~~determining a physical location of a source~~, the method comprising:

transmitting an identifiable acoustic signal <u>from</u> ~~by~~ a transmitter device defined on a source <u>within a data center</u>~~, the source being placed within an acoustic monitoring area~~;

10   receiving the acoustic signal from the transmitter device defined on the source by at least two sensors;

processing <u>the</u> [[a]] received acoustic signal~~, the processing~~ using data from the at least two sensors <u>to identify an approximate physical location of the source</u>; <u>and</u>

~~identifying an approximate localized point in the acoustic monitoring area, the~~

15   ~~approximate localized point defining a physical location of the source; and~~

reporting the physical location of the source over a network.

2.   (Previously Presented)   A method for determining a physical location of a source, the method comprising:

20   receiving an acoustic signal from a source placed within an acoustic monitoring area;

processing a received acoustic signal, the processing using data from at least two sensors;

identifying an approximate localized point in the acoustic monitoring area, the

25   approximate localized point defining a physical location of the source; and

reporting the physical location of the source over a network, wherein the source

is a computer system or a rack including the computer system.

3.   (Previously Presented)   A method for determining a physical

5   location of a source, the method comprising:

receiving an acoustic signal from a source placed within an acoustic monitoring

area;

processing a received acoustic signal, the processing using data from at least two

sensors;

10   identifying an approximate localized point in the acoustic monitoring area, the

approximate localized point defining a physical location of the source; and

reporting the physical location of the source over a network, wherein the acoustic

monitoring area is a data center.

15   4.   (Original)   A method as recited in claim 1, wherein each sensor of the

at least two sensors is a microphone.

5.   (Previously Presented)   A method as recited in claim 1, wherein the

operation of processing the received acoustic signal is an arrival-time correlation

20   process, distributed sensor/time of flight process, or an echolocation process.

6.   (Original)   A method as recited in claim 1, wherein the approximate

locale of the source is determined by an acoustic signal processor.

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7.   (Original)   A method as recited in claim 1, wherein the physical location of the source is reported out-of-band.

8.   (Original)   A method as recited in claim 7, wherein the physical

5   location of the source is reported using wireless technology.

9.   (Currently Amended) A localizing system for determining a physical location of a source, the localizing system comprising:

an acoustic environment configured to include the source, wherein the acoustic

10   environment is a data center;

a transmitter device for transmitting streams of identifiable acoustic signals, the transmitter device being defined on the source;

at least a pair of compact sensors for detecting and capturing the streams of acoustic signals transmitted by the transmitter device; and

15   a signal processor for receiving and processing captured streams of acoustic signals so as to ascertain the physical location of the source.

10.   (Previously Presented)   A localizing system as recited in claim 9, wherein the physical location of a rack is ascertained using an arrival-time correlation

20   process.

11.   (Original)   A localizing system as recited in claim 9, the localizing system further comprising:

a computer console for processing and displaying a location of the source in the

25   acoustic environment.

12.   (Original)   A localizing system as recited in claim 9, wherein the pair of compact sensors is a pair of microphones.

5   13.   (Cancelled)

14.   (Currently Amended) A localizing system as recited in claim 9 [[13]], wherein the data center includes a plurality of structures each including a system site, each system site including a plurality of racks, each rack including a plurality of

10   computer systems.

15.   (Original)   A localizing system as recited in claim 14, wherein each system site includes a signal processor.

15   16.   (Original)   A localizing system as recited in claim 15, wherein each signal processor is defined on a central location in each system site.

17.   (Original)   A method for ascertaining a physical location of a failed computer system in a data center, the method comprising:

20   receiving a failure report from the failed computer system;

transmitting streams of acoustic signals;

capturing transmitted streams of acoustic signals; and

processing the transmitted streams of acoustic signals so as to determine the physical location of the failed computer system.

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18.   (Original)   A method as recited in claim 17, the method further comprising:

reporting the physical location of the failed computer system.

5   19.   (Original)   A method as recited in claim 17, wherein the operation of receiving the failure report from the failed computer system includes,

generating the failure report by the failed computer system; and

communicating the failure report of the failed computer system.

10   20.   (Original)   A method as recited in claim 19, wherein the failure report is communicated out-of-band to a signaling circuitry.

21.   (Original)   A method as recited in claim 17, wherein the operation of transmitting streams of acoustic signals includes,

15   defining an acoustic signal emitter on an outer surface of a rack including the failed computer system; and

generating streams of acoustic signals having identifiable characteristics.

22.   (Original)   A method as recited in claim 17, wherein the operation of

20   capturing the transmitted streams of acoustic signals includes,

receiving streams of acoustic signals;

identifying streams of acoustic signals having identifiable characteristics; and

capturing transmitted streams of acoustic signals having identifiable characteristics.

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23.   (Original)   A method as recited in claim 17, wherein the operation of processing transmitted streams of acoustic signals so as to determine the physical location of the failed computer system includes,

sending transmitted streams of acoustic signals to a signal processor;

5   converting the transmitted streams of acoustic signals; and

executing converted streams of acoustic signals by a computer software so as to determine the physical location of the failed computer system.

24.   (Original)   A method as recited in claim 23, wherein the physical

10   location of the failed computer system is determined using an arrival-time correlation process.

25.   (Original)   A method for generating a sonic map of a data center, the method comprising:

15   for each system site in the data center,

defining an acoustic signal processor on a central location of the system site; and

for each rack in the system site,

placing an acoustic signal emitter on a rack; and

20   for each computer system in the rack,

generating an identifiable signal;

communicating the identifiable signal to the rack;

transmitting associated streams of acoustic signals;

capturing transmitted streams of acoustic signals by the

25   acoustic signal processor;

processing transmitted streams of acoustic signals; and

displaying a locality of the computer system generating the

identifiable signals.

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